| DOCKETED | |
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| **Docket Number:** | 24-OIIP-03 |
| **Project Title:** | Informational Proceeding on Non-Energy Benefits and Social Costs |
| **TN #:** | 259627 |
| **Document Title:** | RCRC Comments_Proceeding on Non-Energy Benefits and Social Costs_Docket 24-OIIP-03 |
| **Description:** | N/A |
| **Filer:** | Dorothy Poole |
| **Organization:** | RCRC |
| **Submitter Role:** | Public |
| **Submission Date:** | 10/21/2024 4:17:56 PM |
| **Docketed Date:** | 10/21/2024 |

RURAL COUNTY REPRESENTATIVES OF CALIFORNIA

October 21, 2024

California Energy Commission
Docket Unit, MS-4
Docket No. 24-OIIP-03
715 P Street
Sacramento, CA 95814

**RE: Comments on 24-OIIP-03 Proceeding on Non-Energy Benefits and Social Costs**

Dear Commissioners:

On behalf of the Rural County Representatives of California (RCRC), I am writing to provide comments related to the integration of non-energy benefits (NEB) and social costs into the California Energy Commission's (CEC's) resource planning and investment decision-making processes. RCRC is an association of forty rural California counties, and the RCRC Board of Directors is comprised of elected supervisors from each member county.

## *I. Introduction*

RCRC appreciates the CEC's efforts to explore, identify, and evaluate how to "integrate NEBs and social costs into CEC analysis and decision-making processes." We agree with petitioners Center for Biological Diversity *et al* that consideration of these factors will "provide a more holistic understanding of the impacts and benefits of investment decisions." In particular, RCRC believes that CEC consideration of NEBs and impacts will help better align the state's energy policies with a host of other wildfire fuel reduction, public health and safety, reliability, and solid waste management goals. While the electrons delivered by these projects are valuable, the range and diversity of co-benefits those projects provide can sometimes be even more important to the state and its residents' health, safety, and quality of life.

One of the consequences of siloed regulatory agency decision making is that the goals of one agency are often reliant upon (but sometimes ignored) by a sister agency. For example, biomass facilities are absolutely crucial to accomplish the state's wildfire risk reduction and fuel management goals; however, electricity from baseload biomass energy is expensive (compared to other forms of intermittent renewable energy) and so utilities and energy regulators are sometimes reluctant to prioritize the purchase of electricity from those facilities. While RCRC completely agrees with the need to keep energy costs down, focusing on the price of electricity delivered by those facilities ignores the key role they play in managing forest fuel

loads and agricultural waste. Similarly, biomass and bioenergy facilities often play an important role in achieving the state's organic waste diversion mandates and air quality goals, as alternatives like landfilling or composting are unrealistic. Failure to align the state's energy planning and investment decisions with these objectives leaves the state, local governments, and businesses with virtually no other alternatives for the management of those waste streams and inhibits compliance with state waste management and wildfire risk reduction goals and mandates.

While RCRC believes NEBs and impacts should inform the CEC's and electrical service providers' decision-making processes, we caution against this process ignoring the regulatory roles and responsibilities of the CEC's sister agencies and adding additional regulatory obligations beyond those required by local air districts, water boards, the Department of Fish and Wildlife, etc. The CEC's consideration of NEBs and impacts may help the state achieve a host of other state goals; however, the CEC's imposition of additional environmental standards and requirements for specific types of energy resources or generation facilities risks ignoring the expertise of those sister agencies and making the state's rigorous environmental protection regime even more difficult for developers and utilities to comply.

RCRC appreciates Leadership Counsel for Justice & Accountability's presentation on community resilience centers (CRCs) highlighting their role and the diversity of benefits they can provide to a community. Given the significant increase in planned and unplanned electrical transmission and distribution outages, this discussion is highly relevant to this proceeding in several key respects. First, there are tremendous NEBs associated with creating and maintaining resilient CRCs that can be islanded during an outage because of the role these CRCs can play in mitigating the acute consequences of power outages on residents (especially sensitive populations). The same NEB's accrue to the creation of microgrids that serve other critical infrastructure facilities. As such, these NEBs should be considered when comparing conventional utility scale solar plus storage projects to rooftop solar or small-scale biomass powered CRCs or microgrids.

## *II. Community Resource Centers*

Over the last several years, RCRC's member counties have seen a dramatic increase in the number of planned and unplanned power outages. Public Safety Power Shutoff (PSPS) events, for example, are planned outages in which circuits are proactively deenergized to minimize fire risk. These outages were designed to reduce the risk of utility-caused wildfires (which they have done), but have also created significant challenges for residents and local governments alike. When first introduced, PSPS events left millions of Californians without power for several days at a time. While PSPS outages have become less frequent and smaller in scope, they still pose a challenge in many areas. PSPS events still occur, but utilities have shifted to "Fast Trip" outages to mitigate fire risk. Fast Trip programs, like PG&E's Enhanced Powerline Safety Settings (EPSS), enable advanced safety system settings that automatically cut power to a particular circuit the instant an object comes into contact with a powerline (e.g.,

tree branches, bird, squirrel, etc.). Unlike PSPS events, Fast Trip outages have no advanced notice to customers.

So far in 2024, there have been over 2,000 EPSS outages impacting over 738,000 unique customers in PG&E's service territory. This year, EPSS outages have cut power to the Templeton 2113 circuit in San Luis Obispo County 26 times, including 7 times in the month of July and 9 times in the month of September. While outages on the Templeton 2113 circuit have been relatively short, there are numerous instances of EPSS outages lasting more than 12 hours at a time. Back-to-back outages are not uncommon and can exacerbate debilitating impact on rural residents and tourism-based economies. 2024 is not an abnormality, as there were over 2,000 outages in each 2022 and 2023 with dozens of circuits experiencing eight or more outages annually.

As a result of these experiences, RCRC has become very familiar with the important role that CRC's can play in mitigating the harsh impacts of both prolonged and recurring power outages, especially for medically vulnerable populations. CRCs that are part of a microgrid (or have the ability to island themselves during a power outage) have the potential to offer a multitude of short-term NEBs during those outages. These short-term benefits may include access to heating, cooling, food, water, and electricity to power medical devices or recharge critical equipment. Longer term benefits offered by CRCs may include medical care, mental health resources, career and employment guidance, education and childcare resources, and much more. By providing these resources during non-emergencies, CRCs can establish relationships with their communities so that they are utilized during periods of crisis. CRCs come in many different shapes and sizes, from county fairground facilities to community libraries to events centers or administration buildings. CRCs may serve as a hub from which backup batteries or generators can be deployed to county residents in anticipation of a PSPS event or during an EPSS outage. However, not everyone in a scattered rural communities may have access to energized CRCs or be able to access these resources due to mobility issues.

To realize these benefits, it is crucial for CRCs to be energized during a power outage. Based on our experiences, we strongly agree with the Leadership Counsel for Justice & Accountability that the state and electrical service providers should recognize the value and NEBs of investing in resiliency strategies for CRCs.

One of the most sustainable and reliable options to power CRCs and provide community resilience in a power outage is a microgrid. A microgrid is a local source of electricity supply independent from the community's existing electrical infrastructure. Power can come from solar panels paired with energy storage or even from biomass generation in some communities. During a power outage, members and businesses of a rural community can minimize losses and damages incurred if they are connected to a microgrid. This capability is especially crucial for individuals who rely on medical devices, individuals with medical conditions that require temperature regulation via heating or cooling, businesses that store perishables (such as food or medication), as well as households that store perishable foods. In addition to CRCs, microgrids can be especially useful resilience tools for multifamily dwellings – particularly those

housing residents who are dependent on reliable electricity to power medical devices. These NEBs should be recognized by the state and electrical service providers during resource planning and investment decision-making processes.

Local governments and community-based organizations can and should collaborate with electrical service providers to deploy backup power and islanding capability to CRCs. Those efforts should be focused on areas with a history of frequent and long-duration power outages. Consideration of the NEBs associated with resiliency projects at CRCs will help provide a better comparison of the value of these projects relative to conventional utility-scale solar.

## *III. Biomass and Bioenergy*

Some forms of renewable energy produce NEB based upon the way in which the system is ***configured*** (like rooftop solar/storage producing resiliency benefits when installed on homes or critical facilities). On the other hand, biomass energy facilities produce a diversity of NEBs simply by generating electricity. While the state and utilities have historically viewed bioenergy in terms of the electrons produced, California must take a more holistic look at the NEBs associated with biomass and the role bioenergy facilities play in helping the state achieve its forest health, wildfire risk reduction, waste management, water quality, and air quality goals.

### *A. Forest health and wildfire risk reduction*

Biomass facilities pay a key role in the state's forest health and wildfire risk reduction efforts. Biomass facilities convert residual materials (for which there is often no marketable use) into energy and avoid the emissions that result when material is managed through open burning, left to decompose naturally, or fuel future wildfires.

Decades of fire suppression have resulted in unsustainable tree density and accumulation of high fuel loads, which "are the dominant factor driving large fire events" in northern California conifer forests.[1] When combined with hotter temperatures and drought conditions, this has created a virtual tinderbox out of much of the state's forests. Where forest fires averaged 60,000 acres annually between the 1950's and 1990's and 175,000 acres annually in the 2000's, they have averaged over 1.2 million acres burned over the last five years.[2] As the Legislature observed:

> *"Wildfires result in significant greenhouse gas emissions. The State Air Resources Board acknowledges that wildfires are the largest source of black carbon, a short-lived climate pollutant, and wildfire emissions are orders of magnitude higher than black carbon emissions from anthropogenic sources. Furthermore, the combustion of forest material during a fire may only contribute a relatively small portion of the total emissions, since a high-intensity fire that*

[1] Assembly Budget Subcommittee No. 3 on Resources and Transportation, Informational Hearing: Wildfire Mitigation Measures, October 20, 2020, Briefing Materials, page 5.
[2] https://www.fire.ca.gov/our-impact/statistics.

> *kills vegetation may actually contribute four to five times as many emissions during post-fire decomposition."*[3]

Indeed, wildfires have released hundreds of millions of metric tons of greenhouse gas emissions over the last decade, thereby undermining many of the state's efforts to reduce emissions from industrial, transportation, and other sectors.

California has spent billions of dollars on wildfire suppression and prevention over the last several years, with the state seeking to rapidly increase the pace and scale of fuel reduction, thinning, and the use of prescribed fire. This has and will continue to result in a significant increase in the quantity of woody biomass wastes. Without biomass facilities, residual materials from thinning operations are often left in the forest where they are either left to burn in piles or decompose naturally. Open pile burning is more commonly used than natural decomposition because of the fire hazard risks associated with leaving materials to decompose naturally.[4] That being said, it can be difficult to find windows of time in which to perform the pile burns. As the California Forest Carbon Plan observed:

> *"Biomass projects can potentially offer net benefits to the public in scenarios where utilizing waste from commercial timber harvests will help reduce risk of damage to forest watershed, reduce costs of fire suppression and wildfire emissions, and/or meet other forest management objectives."*[5]

As the Public Utilities Commission noted, new small scale biomass facilities can "potentially offer communities a wood utilization option where forest treatment needs are high and where other post-thinning wood utilization options do not currently exist."[6]

RCRC strongly believes the state should work to expand the use of biomass facilities and promote the development of newer, even more environmentally friendly biomass technologies to achieve the state's forest health and wildfire risk reduction goals while avoiding the emissions and air quality impacts associated with open pile burning and combustion of post-harvest slash during a wildfire. Biomass facilities reduce greenhouse gas emissions, including black carbon, that would otherwise result from alternative management of those materials. Without biomass facilities, the woody residuals that would be used as fuel are typically managed through open burning or are left in place to decompose naturally or be consumed in a wildfire. The Congressional Research Service noted that "removal of woody biomass (e.g., thinnings) in large quantities may reduce carbon, and some methane, emissions on a CO2-equivalent basis that would have been released if the woody biomass remained in

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[3] SB 901 (Dodd) (Chapter 626, Statutes of 2018) Section 1(e).
[4] Springsteen B, Christofk T, York R, Mason T, Baker S, Lincoln E, Hartsough B, Yoshioka T. 2015. "Forest biomass diversion in the Sierra Nevada: Energy, economics and emissions." Calif Agr 69(3):142-149. https://doi.org/10.3733/ca.v069n03p142.
[5] California Forest Climate Action Team, California Forest Carbon Plan, May 2018, Pages 131-132.
[6] CPUC, Bioenergy Market Adjusting Tariff (BioMAT) Program Review and Staff Proposal, October 30, 2018, pages 9-10.

the forest to decompose."[7] A relatively recent field study indicates that biomass energy generation results in 98-99% lower PM2.5, carbon monoxide, methane, and black carbon emissions compared to open pile burning (along with a significant reduction in NOx and carbon dioxide equivalent greenhouse gas emissions).[8]

Biomass facilities can also help achieve water quality and water yield improvements in forest ecosystems. California's forests have become unsustainably dense, resulting in increased competition for scarce water resources. This has resulted in massive tree mortality events involving hundreds of millions of trees. Forest health projects focused on improving ecosystem function often include projects to return the state's forests to natural densities, which will increase water quality and yield. But these efforts are dependent upon having biomass facilities available to manage the forest residuals that would otherwise be left to decompose, be burned in place, or combust in future wildfires.

*B. Waste management and zero waste goals*

Biomass facilities are integral to California's ambitious and long-standing waste management goals, especially in rural and agricultural areas. Public Resources Code Section 41780 requires local governments to divert 50% of solid waste from landfill disposal. Additionally, Health and Safety Code Section 39730.6 requires the state to reduce the disposal of organic waste by 75%. Beyond those requirements, the state has a goal to divert 75% of solid waste from landfills[9] and is in the process of preparing a statewide zero waste plan.

Beyond merely providing electrons to the grid, biomass facilities have long supported solid and organic waste diversion efforts. With respect to organic waste from normal farm activities, orchards, and vineyards, biomass facilities present a preferable waste disposal option compared to open burning, which releases uncontrolled emissions into the environment and is often performed near sensitive communities. Furthermore, not all orchard and vineyard prunings can easily be turned into compost or reincorporated into the soil because of the quantity of materials involved and the rate at which they decompose.

Both urban and rural communities depend on biomass facilities for waste management. As previously mentioned, biomass facilities are imperative to manage the woody material created from fuels management and forest health improvement projects. Biomass facilities are also important waste management strategies for woody waste coming from urban communities. Some of the woody material from urban communities can be used in composting operations; however, too much woody material can adversely impact the composting process.

There are no other pathways available to manage these woody waste streams if the state's biomass facilities were to cease operations. Diverting forest waste and wood products residuals away from biomass facilities would either flood compost facilities with material they

[7] Kelsi Bracmort, Is Biopower Carbon Neutral? Congressional Research Service, February 4, 2016, page 10.
[8] Springsteen, et al.
[9] Public Resources Code Section 41780.01.

cannot use (or do not have the capacity to process), rapidly increase disposal in rural landfills, and/or result in even greater emissions from uncontrolled open burning. Landfill disposal is not a viable alternative, as it would be inconsistent with state and local diversion goals and existing facilities lack the capacity to deal with this waste stream. Furthermore, it would be extremely difficult to build new or expand the size of the state's existing landfills to address any capacity gaps caused by the loss of bioenergy facilities.

In sum, there are tremendous NEBs that flow from biomass and bioenergy facilities – benefits that are instrumental to achieving many important state needs including wildfire prevention, ecosystem restoration, air quality improvements, solid waste diversion, and climate change goals. These NEBs cannot be overlooked and should be more thoroughly considered in state and utility energy planning and procurement processes.

## *IV. Conclusion*

RCRC appreciates your consideration of these comments and we look forward to close collaboration with you to take a holistic look at the NEBs, impacts, and attributes associated with various types of energy and resiliency projects.

If you should have any questions, please do not hesitate to contact me at jkennedy@rcrcnet.org.

Sincerely,

JOHN KENNEDY
Senior Policy Advocate